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ABSTRACT OF THE DISCLOSURE

The invention teaches methods and compositions for removing thrombi lodged in the microvasculature of an organ. To remove the thrombi, the organ may be perfused, flushed or washed with a suitable perfusion solution to which a sufficient amount of a thrombolytic agent, such as Streptokinase, has been added. The perfusing, flushing or washing process of the organ with the thrombolytic agent will promote thrombolysis on existing thrombi, prevent the formation of new thrombi in the organ, and/or open the vasculature of the organ thereby decreasing vascular resistance and increasing flow. The method of the invention may be practiced using an organ perfusion apparatus that would allow the viability of the organ to be sustained and/or restored upon perfusion with a thrombolytic agent.